



**IDAPA 37.03.09:
Well Construction Standards Rules
Progress Report and Final Draft**

**Presentation to the
Idaho Water Resource Board
May 17, 2007**

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History of Revisions to IDAPA 37.03.09

- 1969: Well Construction Rules first adopted
- 1975, 1978, and 1988: Substantive revisions
 - 1993 - format *only* to comply with Administration
- 2000: IWRB authorizes revision to reflect more current practices and better protect resource
- 2000 – 2002: IDWR meets with the Drilling Community concerning language of new proposed regulations



History of Revisions to IDAPA 37.03.09

- 2002: IDWR awarded a contract with Rocky Mountain Environmental to evaluate the need for new regulations.
- 2003: Phase I report from Rocky Mountain Environmental indicates a need for revisions to the rules.
- 2006 IDWR issued a Notice of Intent to Promulgate Rules.
- 2006-2007: IDWR drafts proposed revision language through Negotiated Rule Making Process



Rule Revision Process: Phase 1 Contract with Rocky Mountain Environmental (2002 - 2003)

Identified Areas of the well construction standards in need of improvement to better protect groundwater resources:

- ★ Well sealing
- ★ Well abandonment
- ★ Well disinfection
- ★ Rule clarity
- ★ Rule enforceability



Rule Revision Process – Phase 2 Utilized Negotiated Rule Making Process

- ◆ Committee of Stakeholders
- ◆ 12 Meetings Held from June '06 through April '07
 - ★ Video teleconferencing
 - ★ Average of 30 people per meeting
 - ★ Revisions posted on IDWR website



How the Final Draft Compares to Current Standards

- Updated sealing requirements
 - Increases annular space requirement
 - Defines acceptable sealing materials and methods
 - Updates sealing language to best industry standards and practices
 - Provided illustrations of acceptable seals
 - Unpopular with drilling community because it limits drill-and-drive method and use of drive-shoes as seals (practices popular in Idaho but unacceptable in other states - levels playing field)



How the Final Draft Compares to Current Standards (Cont'd)

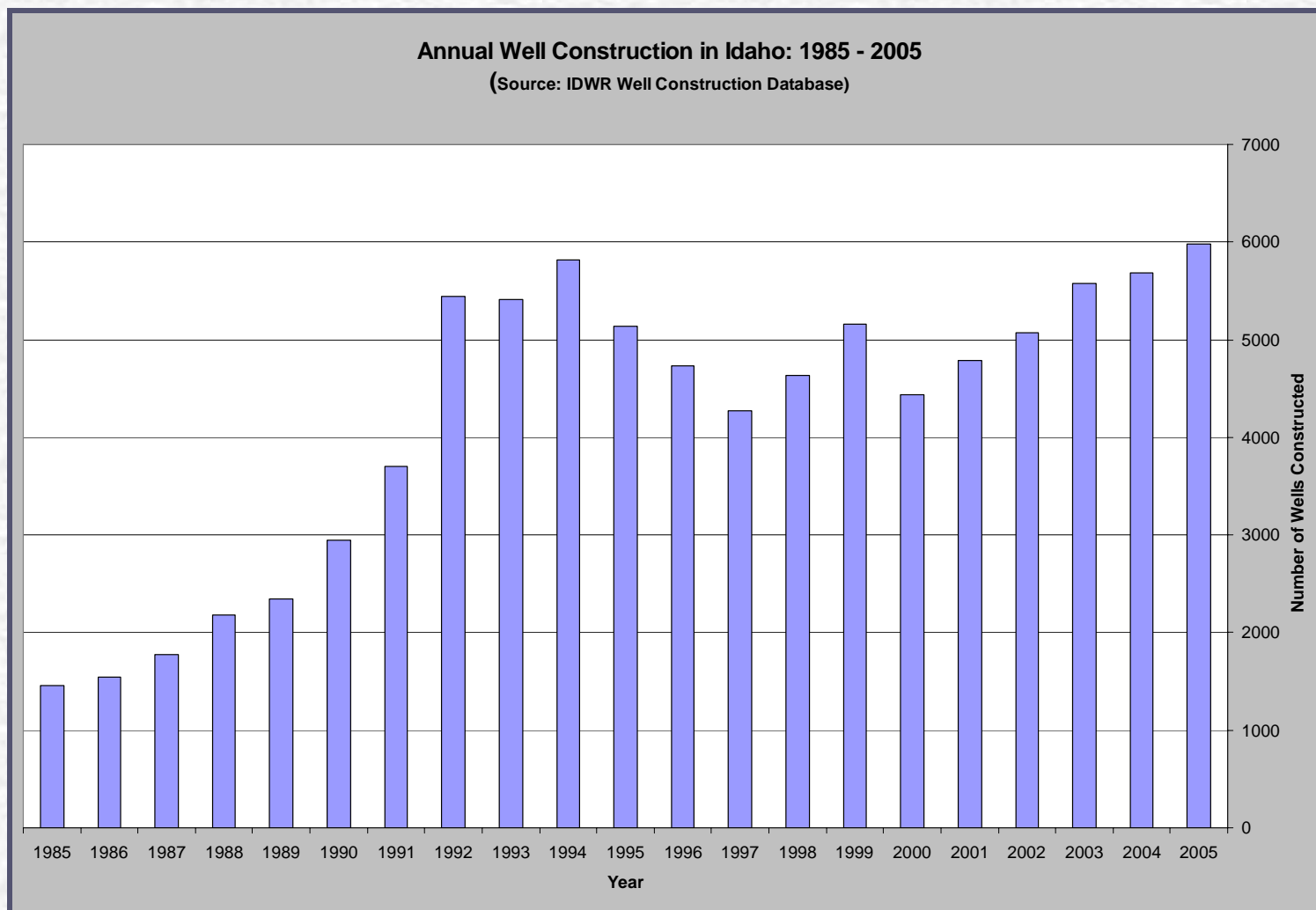
- Clarified Minimum Requirements for All Wells
- Modified Standards for Well Casing Thickness
- Added Use of PVC Casing without Waivers
- Addressed Closed Loop Heat Exchange Systems
- Specified Disinfection Standards and Methodology
- Improved Requirements for Monitoring Wells
- Established Clear Responsibilities for Well Owners
(including maintenance and abandonment)
- Clarified Permit Requirements and Fees



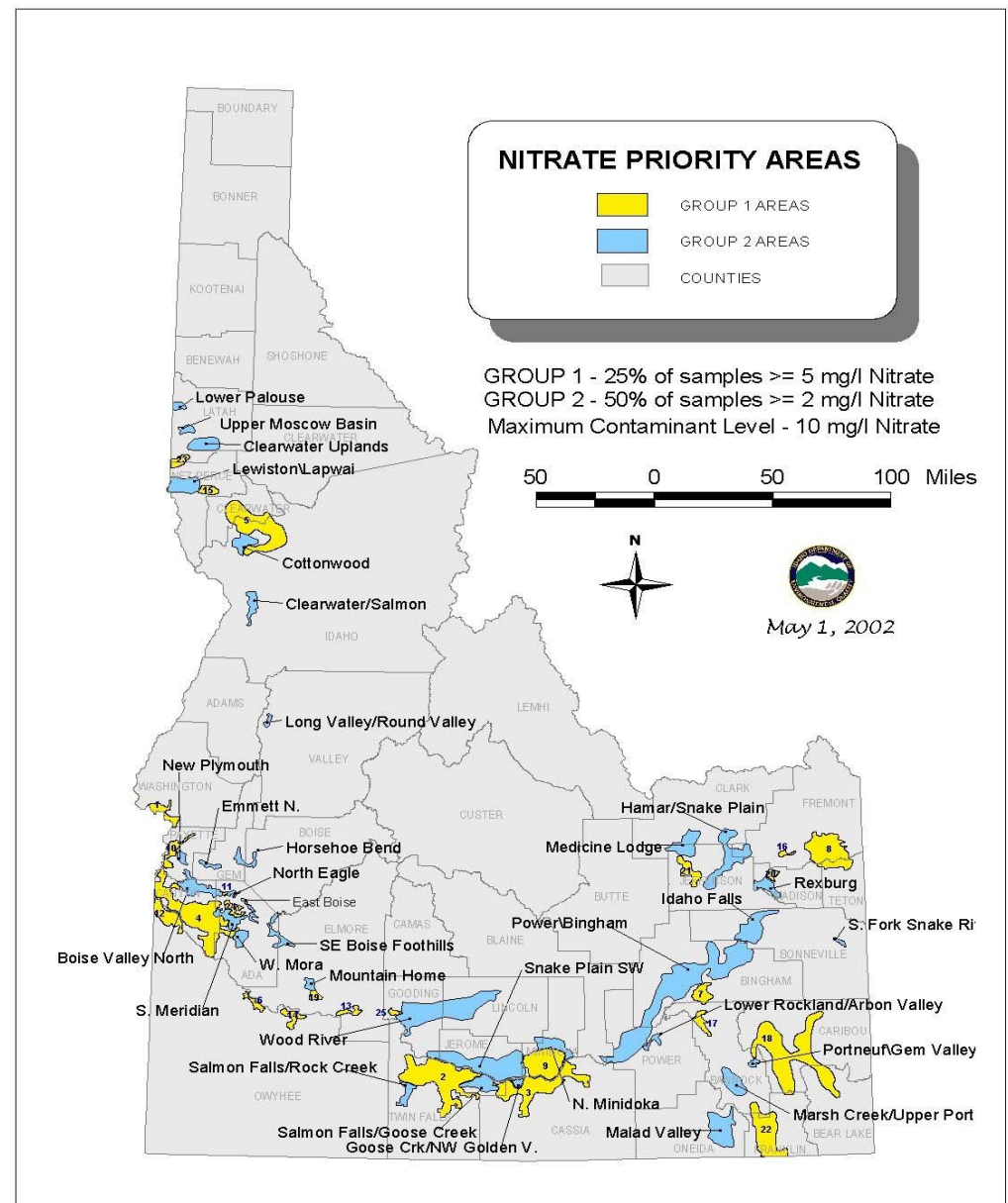
Why Revision of IDAPA 37.03.09 Well Construction Standards Rule is good for Idaho



Well Construction in Idaho Continues to Rise



Areas of Groundwater Contamination are on the rise





Artesian Waste: Lack of Proper Sealing



Artesian
Water
Leaking
Upward
Along
Outside of
Casing



Artesian Waste: Improper Maintenance of Control Cap





Lack of Proper Sealing & Filter Packing: Mine Aquifer Material and Cause Subsidence

12"
Irrigation
Well





Poor seals allow for contamination of the aquifer





Orphaned Wells Are Hazards to Humans, Animals, and are Direct Conduits for Contamination



36"
Diameter
Orphaned
Well



More Orphaned Wells





Well Siting and Set Back Distances

Well Contaminated by
Sewer Line Failure





Areas of Special Geologic Conditions

This concept was proposed by the drilling community during the negotiated rulemaking

- Desire to allow standards to accommodate different geology throughout state
- Requires a process to identify areas that have special or unique geologic conditions where specific well construction requirements could be different than the generic rule and still adequately protection the ground water resource
- The Department will work with IGWA, IDEQ, and other stakeholders to define these areas and propose well construction details based on the hydrogeology of the area.



Areas of Special Geologic Conditions

IDWR understands IGWA may have concerns about this language

Current language to accommodate this concept may not be sufficiently clear and may warrant modification or removal from current draft



Enforcement

Major issue for Drilling Community

- Drillers want to see more enforcement

New Rules Should Improve Enforcement

- Rules Written with Enforcement in Mind
- Improving Clarity and Closing Loopholes



Conclusion

The new rules represents advancement in Idaho well construction rules

- Bring Idaho up to par with current industry techniques, the National Ground Water Association well construction recommendations and with requirements of neighboring states



Timeline

- Submit Final Draft Rules to IWRB for Consideration
(May '07)
 - Publish Draft Rules in Administration Bulletin
(July '07)
 - Public Hearings
(August '07)
 - Legislative Committee Review
(Fall '07)
 - Legislative Action
(2008 Session)
 - New Rules Effective
(July 2008 - upon approval)

Questions?